

knowledge among the more primitive Archichlamydeae. The development of the floral parts and both lines of sporogenesis were studied, the general conclusion being reached that the characters agree with those of the majority of the primitive Archichlamydeae. In the ovule the sporogenous tissue develops as a mass of cells, from which usually a single mother-cell is selected, a late differentiation of that cell which is quite characteristic of gymnosperms. The linear tetrad is formed, but there is the greatest irregularity in the selection of the functioning spore.—J. M. C.

Embryo of *Symplocarpus*.—C. O. ROSENDAHL³⁷ has made a preliminary announcement of a remarkable feature of the embryogeny of *Symplocarpus*. The endosperm destroys both integuments and pushes into the basal tissue of the ovule. There is a short, thick suspensor, and at this end of the "protocorm" both hypocotyl and plumule are differentiated. The developing embryo destroys the endosperm and all of the ovular tissue except at the very base, and thus comes to lie free in the ovary cavity! This means that the "seeds" of *Symplocarpus* are naked embryos. The full paper, with illustrations, will be looked for with interest.—J. M. C.

Nucleoli in mitosis.—The nucleoli in the vegetative cells of *Equisetum arvense*, according to G. BARGAGLI-PETRUCCI, play an important part in mitosis.³⁸ In the resting nucleus there is a single centrally placed nucleolus. At the beginning of mitosis, the nucleolus divides, one of the daughter nucleoli passing to each pole of the nucleus, where it perforates the nuclear membrane and passes to the apex of the achromatic figure.

While the figures are doubtless accurate, much more evidence will be required to establish the contention that the nucleoli play such a rôle in mitosis.—CHARLES J. CHAMBERLAIN.

Resistant potatoes.—The selection of races resistant to disease is one of the most promising methods of meeting many kinds of plant diseases. The resistance of Irish potatoes to blight, tuber rot, and scab has been worked out in an admirable way by STEWART.³⁹ More than one hundred and fifty varieties were tested and their difference in susceptibility is graphically represented. In general, varieties having strong, woody, moderately branched, upright stems, and medium sized, rather thick, firm, hairy leaves were more resistant than varieties possessing weak, much branched, decumbent stems with large, thin, smooth leaves.—F. L. STEVENS.

³⁷ ROSENDAHL, C. OTTO, Preliminary note on the embryogeny of *Symplocarpus foetidus* Salisb. Science N. S. 23:590. 1906.

³⁸ BARGAGLI-PETRUCCI, G., I nucleoli durante la cariocinesi nelle cellule meristematiche di *Equisetum arvense*. Nuovo Giorn. Bot. Ital. 12:699-708. pl. 2. 1905.

³⁹ STEWART, W., Disease resistance of potatoes. Vermont Agr. Exp. Sta. Bull. 122. 1906.